

## **IMPLEMENTATION OF THE 2030 SUSTAINABLE DEVELOPMENT OBJECTIVES IN THE FIRST STAGE**

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### **Abstract**

*The agenda for sustainable development after 2015 for a period up to 2030 adopted by the UN is a global frame of work in full harmony with the principles of human security. 17 goals and 169 tasks are the components of this document and represent continuation of the Millennium Development Goals set in 2015. Achieving the goals and tasks set by 2030 will determine the prosperity of the entire planet and the global well-being of the population. Considering that the first cycle of sustainable development is coming to an end, the aim of this research is to outline some achievements obtained during this period with priority in the areas of eradicating poverty, hunger and malnutrition, ensuring food security, improving the state of the nutritious food as a result, and the sustainable development of agriculture. After a relatively long period of reducing the size of hunger and malnutrition (in 2015 – 784 million people affected by this scourge), the next three years followed with the spike in hunger and malnutrition (in 2017 – 821 million people), which proves the practicality and the need to continue to study the given issue.*

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**Keywords:** *sustainable development, hunger, poverty eradication, food security*

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## **1. Introduction**

The era of the eight Millennium Development Goals (MDGs), launched by the world heads of state and government under the auspices of the UN in 2000 to eradicate extreme poverty, hunger and improve human life by achieving universal access to secondary education, promoting gender equality, reducing mortality of children, improving maternal health, combating mass diseases, ensuring a sustainable environment and creating a global partnership for development, ended on 31 December 2015. People must not know poverty, humiliation, hunger, can lead a dignified life, have decent jobs, medical services, social services, a healthy habitat and environment. The launch of the Millennium Development Goals (MDGs) has created an effective platform for global cooperation. Achieving goals and tasks was in line with the expectations.

According to the World Health Organization's publication in the "UN Millennium Development Goals Report 2015," the measles vaccination prevented the death of 15.6 million children in poor countries, and 6.2 million people were saved from malaria between 2000-2015.

The UN Millennium Development Goals Report (2014) states the maternal death decreased by 45% in 1990-2013. The "Education for All" publication the by Global Monitoring Report (2015) emphasized that global population has to put an end to the gender discrimination in primary education, promoting gender equality and women's empowerment.

Also, in the previously mentioned UN Millennium Development Goals Report (2015) it was estimated that in the 1990-2015 around 2.6 billion people have improved their access to water sources. Positive results were also obtained for the Millennium Development Goal No. 1, which aimed to eradicate poverty and reduce the number of the population suffering from hunger by 50% by 2015 by ensuring and integrating people able to work in decent production conditions. Poor regions have shrunk. Of the 129 monitored developing countries, 72 performed task number one of the MDGs. The population suffering from hunger decreased from 1.01 billion people (18.6% in 1991 of the total population) to 795 million (10.8% in 2015) [1]. Only a few presented excerpts demonstrate the grandeur and significance of the Millennium Development Goals launched in 2000 by saving tens of millions of lives, women, children, the eradication of extreme poverty, hunger.

Despite the combined efforts of the states, some objectives did not have an ascending linear development that did not allow to obtain the predetermined results. The subjective factors, such as the lack of political will of some developed states, are added to this; however, the progress in developing the Millennium Development Goals has been substantial but uneven, especially in some countries in Africa, South-East Asia, as well as in some landlocked and island developing countries.

Among the cases and objective factors that had an impact during the achievement of the Millennium Development Goals we identify the further intensification of the internationalization, globalization processes and interstate integration that increase the interdependence of the national economies, increasing inequalities between different social strata within and between countries. Unemployment remains a global threat, and especially youth unemployment, with increasing proportions in the distribution of economic opportunities, power and wealth. Climate change is intensifying due to global warming, droughts, desertification, trends of unbearable heat, earthquakes, floods and forest fires of catastrophic proportions. Irresponsible exploitation of natural resources leads to their depletion, and excessive deforestation contributes to the land degradation, destruction of bio resources, disappearance of water resources, worsening human habitat, threatening its health, diminishing countries' ability to ensure sustainable development strategies. Such circumstances and economic, social, and environmental factors can trigger extremist movements, form various paramilitary or terrorist groups, create humanitarian crises and forced mass migration. The negative effects occur primarily in countries that do not have sufficient capacity to deal with the tense situations in the economy, in society, the natural scourges with catastrophic consequences. In addition to these negative circumstances with an impact on the food security, the concept of human security is not limited to food. Human

security is universal, all-encompassing, impartial and perceives redemption, and let's not forget fear, misery, poverty, humiliation, social isolation. It encompasses job security, medical services, civilized sanitary conditions, to have a healthy habitat, to have universal access to education, to be protected from the danger of all kinds of never-ending territorial conflicts.

The Goals and Tasks on the Agenda for Sustainable Development to 2030 are a continuation of the Millennium Development Goals, but are much broader, presenting in themselves a set of universal goals with a global mini-character to meet the ancient and current economic, social and ecological challenges of a mankind, and to correspond to the universal fundamental significance of the dignity of the human personality. This universal program has the task of solving inequalities in the pace of economic development between states, creating modern jobs, developing rural cities and towns, necessary infrastructure, industry and energy system, modern agriculture in the poor countries. In the field of ecology, projects are planned to protect the seas and oceans, forests, soils, ecosystems and set of measures are being created to stabilize the climate change. There is the question of a responsible increase in the consumption and production of material goods. The authors of the article cannot and do not intend to analyze the magnitude of this new agenda that includes the global economic, social and environmental objectives over a period of 15 years. The first cycle of sustainable development is coming to an end. The purpose of this foray is to review some issues related to tackling poverty, hunger and malnutrition in the first stage of launching this grand program.

## 2. Degree of investigation of problems at the current stage

Monitoring, analysis and development of proposals on food insecurity, poverty and hunger in all its forms have been and are being carried out by the UN through its relevant bodies. The FAO has a special role to play in this. The concept of food security and the notions related to hunger, malnutrition, poverty were developed at the World Conferences on Food, Environment, Climate Change, on landlocked poor countries, island countries conducted by FAO with input from other organizations in the field of the UN system since the 1960s and which continued from 1970-2015.

In recent years, we often encounter in the literature the notion of food security determined by the 1996 World Conference on this subject, which falls into four categories: **availability, accessibility, stability and use** [2]. Practically, however, in order to obtain the expected results for these four pillars, it is necessary to literally change the world - a totality of factors, conditions, circumstances, tasks that can improve the standard of living. In this context, it is necessary to introduce a general respect for human rights into everyday life, ensuring the rule of law in all countries, developing relations between the people of democratic principles, regardless of race, color, religion, sex, language, political opinion, respect for ethnic and cultural diversity, without internet or interstate conflicts, avoiding the hostile resentments, violence, coercion, implementation of rational and responsible consumption patterns of air, land, river waters, lakes, seas and oceans, underground riches, and forests. In order for the poor people to have the necessary volume and structure of food, they must be provided with jobs, legal salary for legal work, with adequate remuneration able to guarantee not only

economic access to food, but also to cover the daily expenses. A prerequisite for gaining a job is the realization of the universal right to education. In addition to all this, people have the right to have access to energy sources and drinking water as needed, to medical, social and unemployment assistance, incurable diseases, disability, old age at sanitary conditions and civilized hygiene, to live in an environment ecologically established and healthy.

Summarizing what we said, we conclude: theoretically, the level of global food security can be calculated through a large number of indicators that together form the four pillars. Practically, however, food security cannot be achieved if the people of poor countries are not freed from fear and misery - which is proclaimed as the highest aspiration of the people. Human well-being includes, in addition to food, clothing, housing, the right to pay, medical care, social services, a healthy habitat. So, the research started from poverty, hunger, malnutrition, continued with food security and reached the well-being of the population, the quality of life, which includes a lot of indicators from the economic, social, environmental sphere. Respectively, over the years World Health Organization, International Fund for Agricultural Development, World Food Program, United Nations Development Program, United Nations Children's Fund, as well as and the World Bank, International Monetary Fund, USAID have contributed to the analysis of the respective materials. The contribution of these organizations has broadened the concept of food security, rendering new values that correspond to current realities.

In the 90s of the 20th century the search to identify goals and tasks that will ensure a better standard of living intensified. Not coincidentally, in the Millennium Development Goals program launched in 2000, the goal of eradicating extreme poverty and hunger is ranked first out of eight.

Shortly after the launch of these objectives, consultations and searches began on the development of the next program for the period 2015-2030, which ended with an action document of people around the world designed to eradicate poverty and hunger in any form as a global condition of sustainable development of the world economy.

The plan for the period 2015-2030 contains a whole set of objectives and tasks - 17 and 169 respectively. They are all-encompassing, universal, impartial for both lagging and developed developing countries, tasked with ensuring bottom-up sustainable development, balanced in all three components: economic, social and ecological.

This document is in full harmony with the fundamental rights and freedoms of man, the principles of his security, the conception "of the world free from poverty, need, famine, disease and misery, ... free from terror, violence, oppression ... the world in which all have universal access to quality studies, medical services, social insurance, ... to drinking water, sanitation, harmless food at affordable prices, nutritious, in which the human environment is secure, able to oppose negative phenomena, an ecologically stable environment ... in which common access to stable energy resources is ensured at acceptable prices [3].

The resolution of the General Assembly voted by the leaders of the world states reflects the objectives and tasks selected for the next 15 years, which aim to solve problems of common interest and can be solved only through joint efforts of developed, less developed and poor countries, the specific needs and vulnerabilities of each of them.

The applicability of these objectives and tasks, as well as the results, are global. While maintaining the balance of the necessary proportions between the economic, social and ecological components through sustainable development, the signatory states of the document undertake to eradicate poverty and hunger in any form, to improve the quality of life and standard of living of the people.

FAO has expanded its work in recent years. In 2015, this organization undertook studies on agricultural and food production losses throughout the chain from production to retail in order to identify the critical segments in which losses reached their highest levels. At the moment, FAO estimates 14% of the world's food that is lost from post-harvest up to, but excluding, the retail level. Reduction of these losses will contribute to the reduction of prices for given products, improve food security and sustainable environmental development.

Objective 12.3 of the Agenda stipulates "By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses" [4].

Reducing food losses and alterations can contribute to:

- a) achievement of Objective 2 - eradication of hunger, ensuring food security, improving food and sustainable development of agriculture;
- b) Objective 6 - streamlining the use of freshwater resources, and, as a result, ensuring the positive impact on the environment.

### **3. Applied methods and materials**

The concept of food security or insecurity brings together several aspects, elements from different interdependent areas. These notions are indisputably dependent on the results of agricultural activity, processing of agricultural products, commercial activity, population income, exchange rate volatility, climate change causing natural cataclysms - earthquakes, drought, floods, catastrophic forest fires, social unrest, etc.

In turn, hunger and chronic malnutrition cause children up to 5 years of age stagnant growth, exhaustion; in mature people – obesity; in women of reproductive age - anemia.

Accessibility to food is a multilateral category and depends on the price coefficient of these goods which, in turn, respond to the most insignificant economic, trade, currency fluctuations, demographic, political, social, climate. Equally complex and dynamic are the volume and structure of consumption.

In order to analyze the numerous interdependent connections that form food security, different scientific normative methods are used, numerous indicators that, only in their entirety, can explain the real situation with food, as well as the repercussions of poverty, chronic severe hunger economically and socially.

In recent years, in the FAO analysis carried out in partnership with other organizations in the UN system, included the new indicators, and namely the level of severe food insecurity and prevalence of undernourishment (PoU) by country. Some indicators or methods are developed

by specialists in various fields at the request of FAO or other organizations in the UN system in partnership with FAO.

Considering that food security is studied at individual, family, community, national, regional and global level, the research methodology uses various tools such as analysis and synthesis, comparative methods, deduction.

We briefly outline below the three methods that are frequently repeated in the analysis of the given subject. The *historical research method* allows us to evolve the evolution of the hunger and poverty phenomena, the growth rates of population, agricultural production in previous time periods in comparison to those of the current stage.

The *balance method* allowed us to analyze the ratio, including the sum of arable land, and in some countries, the ratio between the agricultural production and their level of processing, nutritional structure of the feed rate including the share of cereals, other Phyto technical plants in energy value, and those of animal origin, the share of food expenditure in the budget of poor families, the degree of dependence on imports of agricultural products into poor countries, etc.

The *statistical method* allowed the analysis of national, regional and international statistical indicators on the development of the agricultural economy, food industry, food supply, correlation between population growth and food volumes produced in different countries, geo economic areas, etc.

As a guideline metric, the volume of cereals produced is measured by the graduated scale that determines the level of food security. The arguments in favor of this idea are the following:

- a) direct to consumer cereal and the derived products provide around 50% of the consumption necessary to obtain the energy that humans need to lead a healthy and active life;
- b) cereals are accepted in the scientific literature and in the practice of economic relations as a barometer of the food safety, because they are less perishable, can be stored, transported, processed at any time of the year;
- c) being a strategic product, cereals have a constant consumption on the internal and external market.

According to FAO specialists, the global food security is calculated in the number of days of consumption. It is considered to be “ensured” in the conditions when the cereal harvest allows a normal consumption for a period of 14 months. Such volume creates a food stability over a period of 12 months and a reserve for 2 months of consumption in case of exceptional situations. The methodology of research uses the following notion of food security adapted to the 1996 World Food Summit: the state in which everyone in one country or another at any given time has physical, social and economic access to quantitative food and nutritious to meet the requirements and needs that ensure an active and healthy life. The following indicators are used to monitor and analyze this notion:

- the level of accessibility to food;
- the effective and sufficient existence of food;
- the level of food quality and safety;
- actual food consumption.

Several indices were used to determine each indicator, the significance of which is measured over 2 years.

Methodology plays an important role in monitoring and analyzing the achievement of the objectives set for the period 2015-2030 through a set of global indicators developed by the specialists in different fields. These indicators are validated by the responsible UN bodies.

Another set of indicators is used by the national governments to monitor each nation's contribution to solving the global problems. Around 300 indicators are developed and used in total. The progress of the objectives and tasks are analyzed in the annual reports presented by the UN Secretary-General.

To complete the chapter on research methodology on this topic, we cannot omit the studies conducted by the Economist Intelligence Unit - an analytical subdivision of the British Economist journal. This research company conducts studies to determine the Food Security Index and based on the rating of each country, the level of food security achieved. These studies present a whole set of indicators that characterize the state of food security in each country in the world being studied.

The food security index practically analyzes state policy and the effectiveness of organizational work in this area and is used by the governments as a tool to analyze operational issues related to food security to improve the situation.

#### **4. Obtained results and discussions**

##### **Achieving the Objectives on sustainable development in the first stage**

September 2020 marks the first five years since the launch of the Agenda for the period up to 2030. The material below presents a brief foray into the results achieved during this period. Priority is given to the achievement of Objectives 1 and 2 of this program, as well as the objectives that contribute to the development of the concept of human security, especially of the strategies that contribute to the creation of sustainable configurations for social upheavals, natural cataclysms, people's protection from constant dangers, lucid poverty, sudden illness, violence, repression, fear, humiliation.

The Sustainable Development Goals were developed on the basis of the achievement of the Millennium Development Goals, and in particular, Agenda 1 - Eliminating Poverty in All Forms Everywhere, and Goal 2 - Eliminating hunger, ensuring food security, improving food, providing the necessary support in the sustainable development of agriculture in particular is based on the results of Goal 1 - Eradicating extreme poverty and hunger from the Millennium Development Goals program.

The results of this program are remarkable: the share of the population living in conditions of severe poverty decreased from 39% in 1990 to 16% in 2010 and then to 10% in 2015. After 2015 the rate of poverty reduction slowed down, the share of those who continued living in poor conditions went down only to 8% despite the fact that some of them were provided with jobs.

Agenda 1 aims to reduce the large size of severe poverty. The share of the population that will continue to suffer from lucid poverty by 2030 is calculated at a level below 3%. According to

the forecasts of specialists, Objective 1 will not be met. The share of the population that will continue living in lucid poverty will be 6%.

An effective measure to prevent poverty is social security. In 2016, around 4 billion people (55% of the world's population) did not receive any kind of subsidy, allowance as a form of social protection. In European and US countries, 87% of the population has social protection, while in sub-Saharan African countries only 14%.

At the same time, only 22% of the unemployed receive cash benefits for unemployment.

Natural disasters usually have a negative impact on socio-economic growth rates and increase of poverty. The direct economic losses in the years 1998-2017 amounted to 3 trillion US dollars, 77% of them were caused by climatic or geographical catastrophes which meant an increase of poverty to 151% compared to the indicator for the period 1978-1997. The loss of human lives from the disasters amounted to 1.3 million people.

Objective 2, as noted above, contains several interdependent tasks: eradicating hunger and ensuring food security, improving food and supporting the sustainable development of agriculture.

In 2015, the number of people who continued to starve went down to 785.4 million - the result of the implementation of Objective 1 tasks in the Millennium Development Goals program launched in 2000. But every year after that the number of people enduring hunger and malnutrition increased (see table no. 1).

**Table 1. Number of people suffering from malnutrition, 2005-2018 (millions) [5]**

Indicators	2005	2010	2015	2016	2017	2018
Worldwide total	947,2	822,3	785,4	796,5	811,7	821,6
Africa	196,0	199,8	217,9	234,6	248,6	256,1
Asia	688	572,1	518,7	512,3	512,4	513,9
Latin America and the Carribean Basin	51,7	40,7	39,1	40,4	41,7	42,5
Oceania	1,8	1,9	2,3	2,4	2,5	2,6
North America and Europe	Lack of data	Lack of data	Lack of data	Lack of data	Lack of data	Lack of data

The analysis of the distribution of people who suffers from malnutrition in the regions of the world shows that several of them (over 500 million people) are residents of Asia. In Africa this index is growing as well - over 256 million, 90% of them live south of the Sahara.

After many years since the 1990's, the level of world hunger was steadily declining. In 2015, this trend was reversed. In the last 3 years, the number of those suffering from hunger has increased and in 2018, as indicated above, it reached 821.6 million, a little less than 11% of the world's population, which means every 8th person in the world goes to bed hungry. The geography of hunger began to spread in Latin America (albeit at a slower pace). North America and Europe also face hunger - almost 8% of the American and European population.

The repercussions of chronic hunger and malnutrition are appalling. Children's growth failure rate in the poorest countries was declining since the beginning of 2000s, but in 2018 this index began to rise again. The number of children who suffered from it has reached 149

million, which it means that every 1 out of 5 children was impacted. In the same year, 49 million children up to 5 years old suffered from hypotrophy, and on the flip side, the in same age category 40 million (5.9%), and 131 million of the 5-9 years of age (20.6% of the total of 638 million) were overweight and obese according to the World Health Organization. Among the adolescent children of ages between 10-19 years - 207 million are overweight (17.3% of the total of 1.2 billion adolescents). In mature people from the age of 18, the overweight population is 2 billion people (total population in this group - 5.1 billion people) [6]. In most countries (52 out of 65 monitored) malnutrition increase correlated with the slowdown of economic growth and decline in 2011-2017, and the increase of the absolute dependence of exporting countries or importation, primarily of the raw materials.

In March 2020 FAO publishes “Countries in need of external assistance for food”. The report groups 44 countries, of which 34 from Africa, 8 from Asia and 2 from Latin America and the Caribbean. These countries have accumulated an excessive deficit of food products and reserves. The food crisis these countries are in is caused by three broad categories, namely:

- countries that have encountered an exceptional lack of production and small supply in the food chain;
- countries where there is a lack of access to food for most of the population, which cannot receive an item in local markets due to very low incomes and high prices;
- countries with a severe lack of food security at the local level due to the influx of refugees.

In 2019 Zimbabwe’s vulnerability was measured by 5.5 million people lacking food, and 3.8 million people were in need of food assistance. In this country the reserves of cereals have decreased due to a natural disaster (Tropical Cyclone Idai hit Zimbabwe on March 16 and 17, 2019), the prices of food products have increased excessively, at the same time the economy has suddenly declined creating high unemployment rate and inflation.

Kenya suffered from drought during the years 2017-2018. The torrential rains that started in May of 2017 left thousands of families displaced by the floods and mudslides. Bridges and roads have suffered damages and livestock was lost. Between October 2019 and January 2020 around 393 thousand people suffered from the floods, unable to provide for their family’s basic needs. Due to vulnerable weather conditions 3.1 million people were food insecure.

In the Democratic Republic of Congo (DRC) the civil insecurity remains. Ongoing military conflict between DRC and Rwanda undermines the efforts from improved harvesting methods, leaving very small levels of country’s grain reserves. Around 13.6 million people suffer from acute food shortages and malnutrition. In February 2020, the World Health Organization announced that 3433 people suffered from the disease caused by the Ebola virus, of which 2249 people had died.

Generalizing this topic, we can conclude: the population of these 44 countries with excessive deficit of food suffers from hunger, malnutrition, lack of food security due to small volumes of actual production or the total lack of these funds. The large disproportions between supply and demand cause high food prices. Due to low incomes, the population does not have access to the necessary food. Less developed countries do not have the economic and technical potential to modernize the agriculture, they lack the means to fight the drought, catastrophic floods, massive fires.

To conclude this brief review on the progress of Objective 1 and Objective 2 of the 2030 Agenda, we will stop on a few passages on the Food Security Index for 2018. This global research was executed by the British research company The Economist Intelligence Unit, a subdivision of the British journal Economist, with the support of the American transnational company DuPont, and included 113 countries, accompanied by the ranking of countries according to the level of food security.

The research presents the analysis of three groups of indicators on food security in countries around the world:

- level of access and consumption;
- the existence and sufficiency of food products;
- the level of food quality and safety.

These groups of indicators include 28 different sub-indicators, the significance of which has evaluated over a period of 2 years. Based on these assessments, the ranking of the countries of the world is determined in accordance with the Food Security Index.

The higher the country's rating, the more developed food security. Below is a group of countries with the highest and the second group with the lowest rating level.

**Table 2. Rating of the countries of the world according to the level of food security.  
The Economist Intelligence Unit: The Global Food Security Index 2018 [7]**

Rating	Countries	Accessibility	Existence and sufficiency	Quality Level	Index
1	Singapore	94,3	81,0	78,1	85,9
2	Ireland	87,3	83,6	84,8	85,8
3	UK	82,6	88,8	80,4	85,0
4	US	86,8	83,2	85,4	85,0
5	Netherland	82,8	86,1	85,1	84,7
6	Australia	84,3	82,6	85,4	83,7
7	Switzerland	82,2	86,1	79,8	83,5
8	Finland	81,3	84,2	83,0	83,2
9	Canada	81,9	84,4	83,0	83,2
10	France	80,5	83,8	86,5	82,9
...	...	...	...	...	...
104	Nigeria	22,5	45,1	30,2	33,7
105	Zambia	19,9	48,7	27,0	33,7
106	Haiti	28,0	39,6	27,5	33,0
107	Malawi	18,0	44,7	34,8	32,4
108	Republic of Chad	22,3	38,6	35,2	31,5
109	Sierra Leone	21,8	35,9	29,0	29,2
110	Yemen	29,0	31,0	20,3	28,5
111	Madagascar	12,4	42,0	22,5	27,0
112	Rep. Kongo	14,3	36,0	28,3	26,1
113	Burundi	14,7	30,0	30,6	23,9

To summarize the development of Objective 2 tasks requires to take into account the presented results, the dynamics of change, trends of economic slowdown and economic downturn that were accompanied in recent years by the spread of hunger and malnutrition in the developing countries, economic and technical inferiority, lack of capacity to counteract these phenomena.

The Covid-19 pandemic has exacerbated the situation of hunger and malnutrition in 30 other countries, according to UN data. The UN believes that in 2021 the world may face a humanitarian crisis. It will be the largest in the last 75 years due to continued due to armed conflicts and the coronavirus pandemic. Under such conditions, achieving Goal 2 to eradicate hunger by 2030 is proving to be an increasingly complicated task [8].

Goal 3 is dedicated to ensuring a healthy living, providing support for increasing well-being, and prosperity for everyone regardless of age.

The volume of funding from all sources that were allocated to the development of the basic health system in the period 2010-2017 increased by 61% and amounted in 2017 to 10.7 billion US dollars.

Progress has been made in the area of child mortality up to 5 years of age. In 2017, the mortality rate was reduced to 39 cases from 77 cases per 1,000 births in 2000. Infant mortality decreased from 9.8 million in 2000 to 5.4 million in 2017. In the period 2013-2018 almost 40% in the countries of the world, less than 10 doctors returned per 10,000 inhabitants, and in 98% of the poorest countries, medical services were provided by 40 nurses per 10,000 inhabitants.

Some progress has been made related to UN Objective 4- Quality Education. Since 2015 the worldwide number of children out of school has dropped by almost a half. Many more girls attended school than ever before, enrollment in primary education has reached 91%. Despite these positive moments, the progress in the developing regions was not big enough as 262 million children and young people aged 6 to 17 in 2017 did not attend school, and the level of education of half of students and adolescents did not meet the minimum standards for reading and math.

Issues that can ensure equality between men and women according to the objectives of Objective 5 have not gained an upward trend. In 90 countries, women spend three times as much time caring for children and working at home compared to men in 24 hours. Such occupations limit the time for women to work in paid jobs or study, which exacerbates inequality with men. The share of women is 39% of the total employed in the world economy, while the share of management positions held by women does not exceed 27%. In the environment, the gap in the remuneration of women compared to men is over 20% regarding the management staff, craftsmen, and craftsmen with adjacent specialties.

The uninterrupted supply of water, the rationalization of organized consumption of water resources, the satisfaction of basic sanitation for the entire population, these are the demands of Objective 6. At present, billions of people do not have access to safe water and basic sanitary conditions, lack sinks (washbasins) or other devices adopted for wash your hands with soap. In order to meet the tasks set by Objective 6 by 2030, it is necessary to double the pace of progress in this area. The share of the population consuming water through organized supply respecting the security requirements increased in the period 2000-2015 from 61% to

71%, and in 2017 the situation remained unchanged. Currently 785 million people are without any water supply services.

The number of the population that has access to secure health services increased from 28% in 2000 to 45% in 2017, and the share of the population that does not have basic sanitary conditions decreased from 44% in 2000 to 27% in 2017.

About 38% of the population in underdeveloped countries had basic conditions adapted to wash their hands with soap and water, which means that another 3 billion people do not have basic conditions for this procedure.

Access to energy sources in the poorest countries has widened. The renewable energy sector is actively developing, increase efficiency in this sector, but so far around 800 million people are living without energy and have to make special efforts to access green fuels and food preparation technologies. The share of the population with access to these services has increased from 37% in 2010 to 61% in 2017; however, almost 3 billion people use inefficient fuel and polluting food preparation technologies. The overall primary energy consumption intensity index (energy consumption per unit of GDP) improved from 5.9 in 2010 to 5.1 in 2016. Energy efficiency increased by 2.3% but remains compared to the figures set out in Objective 7.

Objective 8 is devoted to the development of the economy in an upward, comprehensive, sustainable way to create decent productive jobs for the full-time employment of all able-bodied people, transforming this mode of production into a driving force of progress capable of ensuring the means to achieve the objectives and pre-established tasks by 2030. For this, GDP in the least developed countries is projected to increase from 4.5% in 2017 to 5.7% in 2020 but does not reach the 7% burden set in the 2030 program. For the first time in 2018, labor productivity (calculated GDP at a place in the annual labor force) increased by 2.1% - the highest level since 2010.

Despite the combined efforts to reduce inequalities within and between countries, these issues, as before, are a matter of a serious concern. In 2011-2016 in 92 countries 40% of the poorest population earned less than 25% of the total income. Worries are being caused by the simultaneous increase of the income of the richest part of the population, which makes up 1%. Developing countries make up 70% of the members of the UN General Assembly and the World Trade Organization, who use "one member-one vote" system. Their share of votes in the IMF is much lower. The World Bank undertook changes in October 2018 in this regard. But in the best case, developing countries will receive 40% of the vote and the share that these countries represent as members of the World Bank - 75%. In order to reach the scope of the Objective 10, developing and the poorest countries have to be provided with an equal access to efficient financial services; exports from these countries to rich countries to be exempt from customs duties to increase aid to small and island countries.

In the world economy, resource consumption is rapidly increasing, including resource spending per capita. In order to move to a consumption built on rational models, Objective 12 requires urgent action to be taken to ensure the current consumption of resources does not lead to an environmental gradation.

Even though the global consumption of material resources increased from 87 billion tons in 2015 to 92.1 billion tons in 2017 (up 254% compared to 1970). Since the 2000s, natural resource extraction rates are constantly increasing. These high annual growth rates have become decisive over the past 20 years, creating an overburden on nature. Unless coordinated political action is taken by 2060, up to 190 billion tons of resources will be expected. To meet demand requirements in 1990, 8.1 tons of useful ores were consumed, and in 2015 this index has reached 12 tons. In order to change the paradigm in favor of rational consumption and production models, the regulatory basis and economic policies in the field require to change. In 2018 around 303 of such policies and instruments were developed by 71 countries in addition to the countries of the European Community. They will make resource consumption more efficient, reduce residues, implement the principles of sustainable development in economic sectors.

A major problem for all mankind has become an unannounced climate change. The aim of the Objective 13 is to develop urgent measures to reduce climate change that have a negative impact on the health of the population endangering food security, disappearing freshwater springs, causing migration of the population to a continental scale, diminishing economic development in recent years.

The emission of greenhouse gases is one of the major causes for the climate change. In 2017, the concentration of CO<sub>2</sub> gases in the atmosphere reached new records. This increase means an increase of 146% compared to the beginning of industrialization. In order for the global temperature to rise within the predetermined limits but no more than 1.5°C, it is necessary for the emission of gases to be compatible with the trajectory of the sustainable development of the world economy. Climate stabilization and stimulating sustainable development are two interdependent directions that complement each other.

In 2018, material losses caused by the natural disasters amounted to 186 billions of US dollars, in 2019 - 150 billions, insurance companies lost 52 billions, the largest losses in the last 30 years. A total of 820 natural cataclysms took place in 2019 [9].

The Paris Agreement within the United Nations Framework Convention on Climate Change has been ratified by 185 countries. Funding for the development of national plans for the adoption of countries to counter natural disasters and mitigate climate change has also been launched [10].

Investments of a significant volume are needed to achieve the Sustainable Development Goals by 2030. The required amount of investment is estimated to range between billions to trillions of US dollars. Funding to close the infrastructure gap in areas of water supply, basic sanitary conditions, public transport, energy development, irrigation, flood protection need to expand from 2% to 8% of GDP depending on the strategic direction selected by states. At the national level, it is necessary to align the financial system with national sustainable development strategies.

The national financial and technological resources of each state must be proportionate to the obligations assumed by the state. National states have the main responsibility for meeting the objectives of the Agenda by 2030. National governments are the driving force behind their own national strategies. As components of the global obligations in the given areas, they are

involving civil society, private sector, necessary funding, technological resources and scientists in this process.

A special role is given to the Addis Ababa Program adopted at the Third International Conference on the Financing of the Sustainable Development Goals by 2030, which includes strategies in various areas, measures to support them and the necessary financial funds.

The need for annual investment expenditures to achieve the Sustainable Development Goals in all sectors is estimated by specialists at 5-7 trillion US dollars. Currently, the expenses incurred in 2016-2019 are far from necessary.

The Global Investment Alliance created in 2019 and supported by the UN, brought together management from 30 companies and began to play a significant role in mobilizing financial resources. In addition, there is a growing financial interest in the Sustainable Development Goals by 2030 thanks to the fact that these investments bring economic advantage and benefits. Achievements of the Objectives will open up market opportunities with a turnover of 12 trillion US dollars and will ensure the creation of 380 million jobs by 2030.

## 5. Conclusions

1. The efforts of several governments through partnership that have included the Sustainable Development Goals and Tasks to 2030 in their priority national strategic plans, mobilizing the necessary economic, technological and human potential, have made some progress in economic and social transformations. According to the report presented by the UN Secretary General at the 2019 Session, the positive trends in sustainable development, in the decrease of severe poverty and infant mortality, viral hepatitis infection were highlighted. In 2010-2019, the water areas that passed into the national jurisdiction and simultaneously passed in the category of the supervised ones have doubled. The access to electricity of the population from some of the underdeveloped countries has increased, the share of the population living in poor peripheral neighborhoods has decreased, unemployment has decreased to the level until the crisis of 2008-2009. Progress was made in promoting gender equality, as well as in attracting the means to implement this program.
2. The agenda for sustainable development by 2030 has grown: the necessary measures<sup>4</sup> and the serious approach of some national governments are reflected in the progress made. The scale of the problems and the effectiveness of solving the objectives and tasks as a result set have attracted the attention of the local governments of major cities in the world, transnational corporations, civil society, academia and science.
3. Despite the huge changes that have been made to achieve “zero hunger” by 2030, the multi-annual downward trend in the number of those suffering from hunger in 2015 has been reversed. The number of people in need of food began to grow. At the same time, the number of people suffering from hunger increased from 804 million in 2016 to 821.6 million in 2018, which means that one in nine people sleeps on an empty stomach, and one in three suffers from malnutrition. Covid-19 has worsened the situation. According to UN estimates, the number of those who will starve will increase by another 130 million. In this environment Goal 2 "zero hunger" will be difficult to achieve by 2030 according to FAO estimates.

4. The symptoms of the spread of hunger, malnutrition, lack of food security have appeared in virtually all sub-regions of the African continent, Latin America, while malnutrition has remained stable in most regions of the Asian continent. Many underdeveloped countries are in a state of stagnation or economic decline. With the geographic spread of hunger, severe, extreme poverty has spread further. According to FAO experts' forecasts, the extreme poverty index by 2030 will be 6%. Goal 1, which calls for the eradication of severe poverty everywhere in any form, will not be met.
5. Currently, almost 2 billion people in the world suffer from a lack of food security in moderate or severe form. As a consequence of the lack of regular access to the necessary and nutritious volume of food, people are at risk of eating problems of relative quality and condition, and unsatisfactory health. So, due to the lack of food security in moderate or severe form, low-income and middle-income countries are impacted first, but the 8% of people in the USA and Europe also face these problems. Shocks and economic crises worsen the situation of severe food insecurity. Such problems also arise in underdeveloped countries with the slowing and decline of economic growth, where inequalities in the distribution of income and other resources causing social disparity have taken root.
6. It is concerning that insignificant progress has been made in reducing infant mortality, combating HIV/AIDS, tuberculosis and malaria since 2015. As a result of the increase in the population suffering from hunger and malnutrition, the number of obese children also increased, such as those who are behind in development, those who are exhausted, etc. It is frightening how quickly biodiversity is being lost- almost a million species of animals and plants are on the verge of extinction.
7. In order to achieve the Objectives and tasks of the Agenda for Sustainable Development for a period up to 2030, a huge volume of investments is needed, estimated at billions to trillions of US dollars. In order to close the infrastructure gap in such water supply areas, the creation of basic sanitation, public transport, energy system, flood protection, expenditures may vary by 2030 from 2% to 8% of GDP depending on the strategy selected infrastructure development [11].

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### Rezumat

*Ordinea de zi în domeniul dezvoltării durabile după 2015 pe o perioadă de până în 2030 adoptată de ONU este o programă de activitate globală în deplină armonie cu principiile securității omului. Cele 17 obiective și 169 de sarcini ca părți componente a acestui document este o continuare a Obiectivelor de Dezvoltare ale Mileniului determinate în 2015. Realizarea obiectivelor și a sarcinilor trasate până în 2030 va determina prosperitatea întregii planete și bunăstarea populației la nivel global. Luând în considerație că primul ciclu de dezvoltare durabilă se apropie de sfârșit, scopul acestei lucrări constă în a schița unele realizări obținute în această perioadă cu prioritate în domeniile lichidării sărăciei, foametei și malnutriției, asigurării securității alimentare și îmbunătățirii situației cu alimente nutritive ca rezultat al dezvoltării durabile a agriculturii. După o perioadă relativ îndelungată de reducere a dimensiunilor foametei și subalimentației (în 2015 - 784 milioane de oameni acuzau acest flagel) în următorii trei ani se observă o creștere ce acuză foamea și subnutriție (în 2017 – 821 de milioane de oameni) – fiecare a noua persoană nu primește hrană suficientă, ce dovedește actualitatea și necesitatea studiilor problemei date în continuare.*

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**Cuvinte-cheie:** dezvoltare durabilă, foamete, eradicare a sărăciei, securitate alimentară

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**Аннотация**

*Повестка дня в области устойчивого развития после 2015 года на период до 2030 года, принятая ООН, представляет собой глобальные рамки работы, полностью гармонирующие с принципами безопасности человека. 17 целей и 169 задач являются составными частями этого документа и представляют собой продолжение Целей развития тысячелетия, которые завершились в 2015 году. Достижение целей и задач, поставленных к 2030 году, будет определять процветание всей планеты и глобальное благополучие населения. Учитывая, что первый цикл устойчивого развития подходит к концу, цель данного исследования – обзор некоторых достижений за этот период, с приоритетом в областях искоренения бедности, голода и недоедания, обеспечения продовольственной безопасности, улучшения питательности пищи, в результате и устойчивого развития сельского хозяйства. После относительно длительного периода сокращения масштабов голода и недоедания (в 2015 году число пострадавших от этого бедствия уменьшилось до 785 миллионов человек), в следующие три года последовал всплеск голода и недоедания (в 2017 году – 821 миллион человек), что доказывает и практичность и необходимость продолжения изучения данного вопроса.*

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**Ключевые слова:** *устойчивое развитие, голод, искоренение бедности, продовольственная безопасность*

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